DISCOVERY SERVICES:

CURRENT OPPORTUNITIES AND FUTURE TRENDS

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Description

Breeding describes the general landscape of library resource discovery products, the trend toward web-scale, index-based services, and some of the issues that sparked this initiative to bring increased transparency and other improvements to the ecosystem involving libraries, content providers, and discovery service creators. As co-chair of the NISO Open Discovery Initiative, he summarizes the recommended practices that it developed.

Library Technology Guides

Documents, Databases, News, and Commentary

Library Technology Guides provides comprehensive and objective information surrounding the many different types of technology products and services used by libraries. It covers the organizations that develop and support library-oriented software and systems. The site offers extensive databases and document repositories to assist libraries as they consider new systems and is an essential resource for professionals in the field to stay current with new developments and trends. Relevent news items are posted daily on Twitter:

GuidePosts

Perspective and commentary by Marshall Breeding

Blog Archive 🔲 RSS

New Resource available in Library Technology Guides: ILS implementations by Carnegie Classification

One of the key components of Library Technology Guides is the **libraries.org** (formerly lib-web-cats) directory of libraries that provides details about libraries and the major technology products they use. This resource can be used to identify and assess the adoption patterns of systems used among any given group of libraries. The advanced search provides the ability to select libraries according to geographic categories, collection size, library type, and other factors. I had previously created specialized reports for groups of particular interest such as the members of the **Association of Research Libraries**, the **Urban Libraries Council**, and the **Association of Southeastern Research Libraries**.

An additional tool is now available that produces reports of academic libraries in the United States and their automation systems according to the **Carnegie Classification Levels** of their parent institutions. This capability was made possible through the extension of the data elements for of the entries for academic libraries in the United States.

View it now: report by Carnegie Classification.

Search LTG: _____

Industry News

Monday Aug 25, 2014   🔲 RSS

Full Automation News Report

20 most recent items:

August 25, 2014. **Spydus 9 Self Service goes Live in Masterton, New Zealand.** Civica announced the release of Spydus 9 Self Service, with Masterton District Library in New Zealand as the first customer to go live. Spydus Self Service, now core to Spydus 9, builds on Civica's ex ... **<<more>>**

August 21, 2014. **EBSCO's eBook Collection Continues to Expand with Release of 12 New Subject Sets.** EBSCO Information Services announces the release of new EBSCO eBook Subject Sets, which increases the total number to more than 200. ... **<<more>>**

August 21, 2014. **Rider University (NJ) selects Sierra Library Services Platform.** Innovative announced that Rider University (Lawrenceville, NJ) has selected the Sierra Library Services Platform and will migrate from a Voyager system provided by

Library Technology Industry Reports

American Libraries

- 2014: Strategic Competition and Cooperation

Library Journal

- 2013: Rush to Innovate
- 2012: Agents of Change
- 2011: New Frontier
- 2010: New Models, Core Systems
- 2009: Investing in the Future
- 2008: Opportunity out of turmoil
- 2007: An industry redefined
- 2006: Reshuffling the deck
- 2005: Gradual evolution
- 2004: Migration down, innovation up
- 2003: The competition heats up
- 2002: Capturing the migrating customer

Library Syste

Library Systems

تقرير أنظمة المكتبات 2014

المنافسة والتعاون الاستراتيجي كان من أهم السمات التي ميزت عام 2013، فقد شهدت صناعة تقنية المكتبات منافسة حادة في عام 2013، في ظل وجود مجموعة متعددة من المنتجات المتنوعة و التي تتنافس فيما بينها لتحقيق التوقعات التي لا تلبث أن ترتفع باستمرار، لتمكين أنفسهم و تأكيد موقعهم في هذه الدائرة الحرجة - و التي أجمعت فيها العديد من المكتبات النظر في اخيارات المتاحة لتقنياتها المستقبلية. سنلاحظ خلال هذا التقرير العديد من المتغيرات والتي من أهمها:

- العديد من مزودي الخدمات قاموا بتوسيع انتشارهم العالمي، كما سارع قيام بعض اللاعبين الكبار بتوسيط منظومتهم الداخلية و إنجاز ما تبقى لتطوير منتجات طموحة.

- المنافسة قد احتدمت حتى طالت التطبيقات التي يستخدمها موظفو المكتبات لإدارة مجموعات الكتب لديهم و أتمتة عملياتهم. و التي شملت الجيل الجديد من منصات لخدمات المكتبة إضافة إلى نظم المكتبات المتكاملة.

- خدمات الاستكشاف واصلت البقاء كمجال رئيسي نشط، ينظر إليه أمناء المكتبات بجدية نظرا لاتصالهم المباشر و الحميم مع الزائن. كونها إحدى أهم وسائل الوصول للمجموعات والخدمات.

خدمات الاستكشاف واصلت البقاء كمجال رئيسي نشط، ينظر إليه أمناء المكتبات بجدية نظرا لاتصالهم المباشر و الحميم مع الزائن...

- هذه المرحلة الصناعية قدمت العديد من الخيارات لحقوق الملكية الفكرية أو المصادر المفتوحة على حد سواء. البعض من هذه الخيارات يعتمد على التقنيات السحابية أو الأجهزة المحلية. و بالرغم من أن الجيل الجديد من منصات خدمات المكتبات قد دخل مرحلة التبني المبكر من قبل البعض. لا يزال نظام المكتبات المتكامل قيد الاستخدام خصوصا بعد تطويره لإدارة الكتب الإلكترونية.

- منتجات جديدة دخلت مجال تقنية المكتبات وتم اعتمادها، وتطبيقات أخرى تنافس للبقا، هذه التطبيقات هي التي لديها القدرة على إعادة تشكيل المشهد المستقبل اعتمادا على ما إذا كانت ستحقق الكفاءة والتحولات التي وعدت.
يصف هذا التقرير الوضع القائم والاتجاهات المتعلقة بالمنتجات الاستراتيجية والتقنية والخدمات والمنظمات المنتجة لهذه التقنيات والتي تقدم الدعم لها وهو يغطي المنتجات الرئيسية لإدارة الموارد، وخدمات الاكتشاف، وغيرها من التقنيات التي يعتمدها المكتبات داخلها وإتاحتها لعملائها للوصول إلى المجموعات والخدمات.

SYSTEM NAME	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
							TOTAL						
Symphony	117	207	124	134	91	71	121	135		126	122	104	128
Horizon	126	114	168	193	147	94	15	0		20	2	1	9
EOS.Web			18	157	196	257			186	97	91	58	70
Millennium	157	136	144	119	107	95	95	64	45	39	32	30	6
Library.Solution	79	70	73	58	41	34	35	32	30	43	48	13	17
Carl.X / Carl.Solution				1	3	10	0	0	0	3	2	1	2
Evolve										73	19	11	8
Amlib	36	139	58	38	42				5	12			
Voyager	50	44	35	22	34	12	4	5	2	5	1	6	0
Aleph	80	58	51	53	83	67	29	26	47	39	25	26	25
Virtua	37	60	67	35	25	27	30	39	18	22	13	14	7
Polaris ILS	12	21	20	37	39	54	32	56	33	23	53	30	30
Spydus 8 / MS	50		21	16	50	56	51	25	15	32	46	26	22
Vubis Smart	13	34	54	56	60	56	40	46	12	1		0	
V-Smart									11	12	21	23	20
Koha									7	44	54	34	68
LibLime Academic Koha											7	5	4
LibLime Koha						30	57	40		44	27	37	30
Koha										11	6	8	6
Evergreen								6	18	15	21	37	12

Discovery Service Installations

Product	2007	2008	2009	2010	2011	2012	2013	Installed
EBSCO EDS							1774	5612
Primo	12	37	53	506	111	101	98	1407
AquaBrowser	55	339	64	69	74	58	81	750
Encore	72	72	109	56	72		36	346
LS2 PAC		46	77	58	88	73	81	382
Summon			50	164	214	158	238	673
Enterprise		16		75	100	102	123	407
Civica Sorcer			7	12	22	3		42
Axiell Arena			61	57	33		35	316

The Evolution of Library Resource Discovery

Challenge: fragmented approach to discovery and services

- Library Web sites offer a menu of unconnected silos:
  - Books: Library OPAC (ILS online catalog module)
  - Search the Web site
  - Articles: Aggregated content products, e-journal collections
  - OpenURL linking services
  - E-journal finding aids (Often managed by link resolver)
  - Subject guides (e.g. Springshare LibGuides)
  - Local digital collections
    - ETDs, photos, rich media collections
  - Discovery Services – often just another choice among many
- All searched separately

Online Catalog

ILS Data

Search:

Scope of Search

Search Results

- Books, Journals, and Media at the Title Level
- Not in scope:
  - Articles
  - Book Chapters
  - Digital objects
  - Web site content
  - Etc.

Discovery from Local to Web-scale

- Initial products focused on technology
  - Mostly locally-installed software
- Current phase is focused on index-based discovery
  - Article-level representation: citation, abstract, full-text
  - A&I content (sometimes)
  - Local content (Harvested from ILS and other repositories)

Web-scale Index-based Discovery

Search: [   ]

Search Results

Usage-generated Data

Customer Profile

Consolidated Index

ILS Data

Digital Collections

Web Site Content

Institutional Repositories

Aggregated Content packages

Open Access

E-Journals

Reference Sources

Pre-built harvesting and indexing

EBSCO Discovery Service

Summon Web Scale Discovery

ExLibris Primo

WorldCat
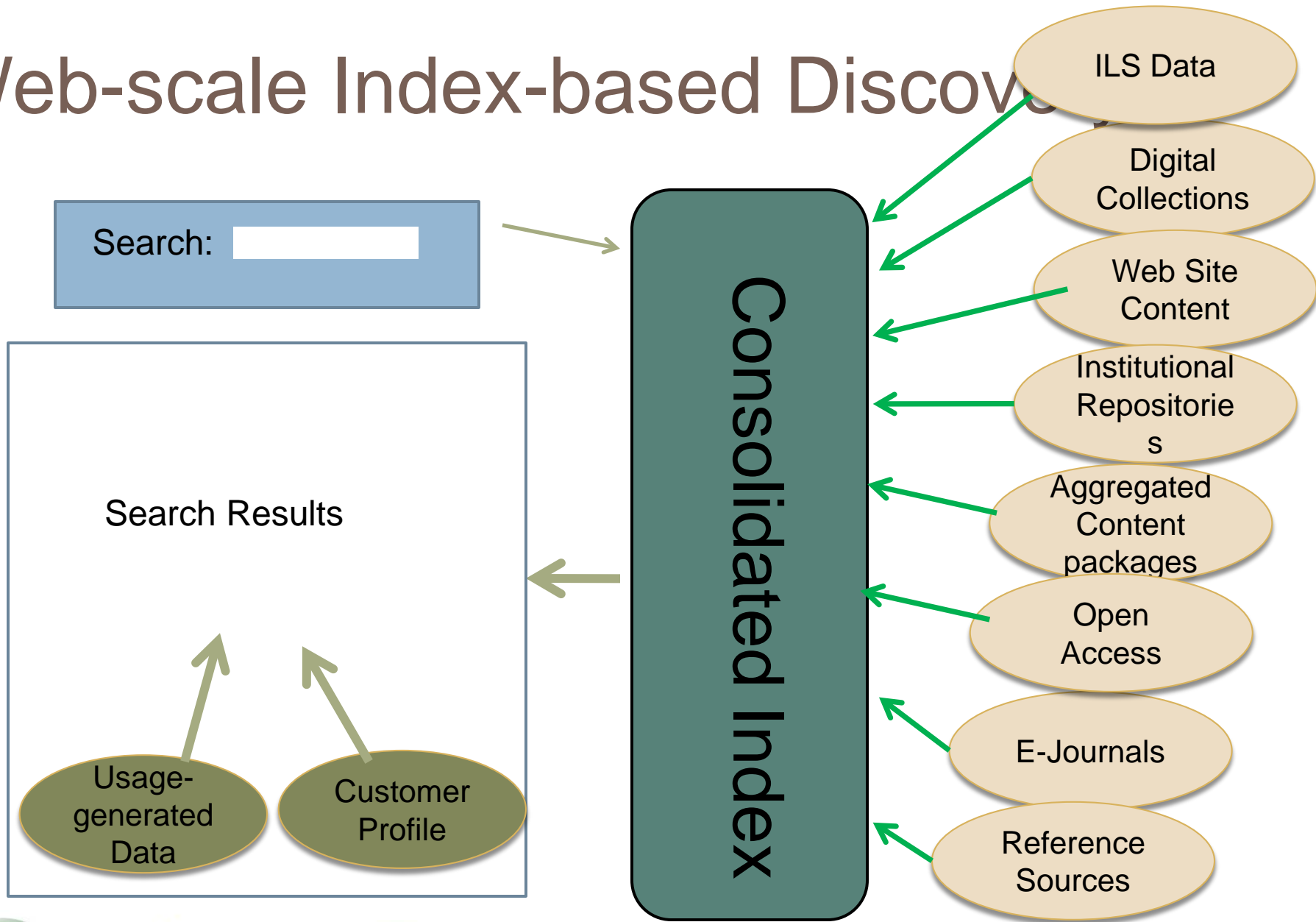
Public Library Information Portal

Search: [   ]

Search Results

Usage-generated Data

Customer Profile

Consolidated Index

ILS Data

Digital Collections

Web Site Content

Community Information

Aggregated Content packages

Customer-provided content

Reference Sources

Archives

CBOIMBMLOINOS
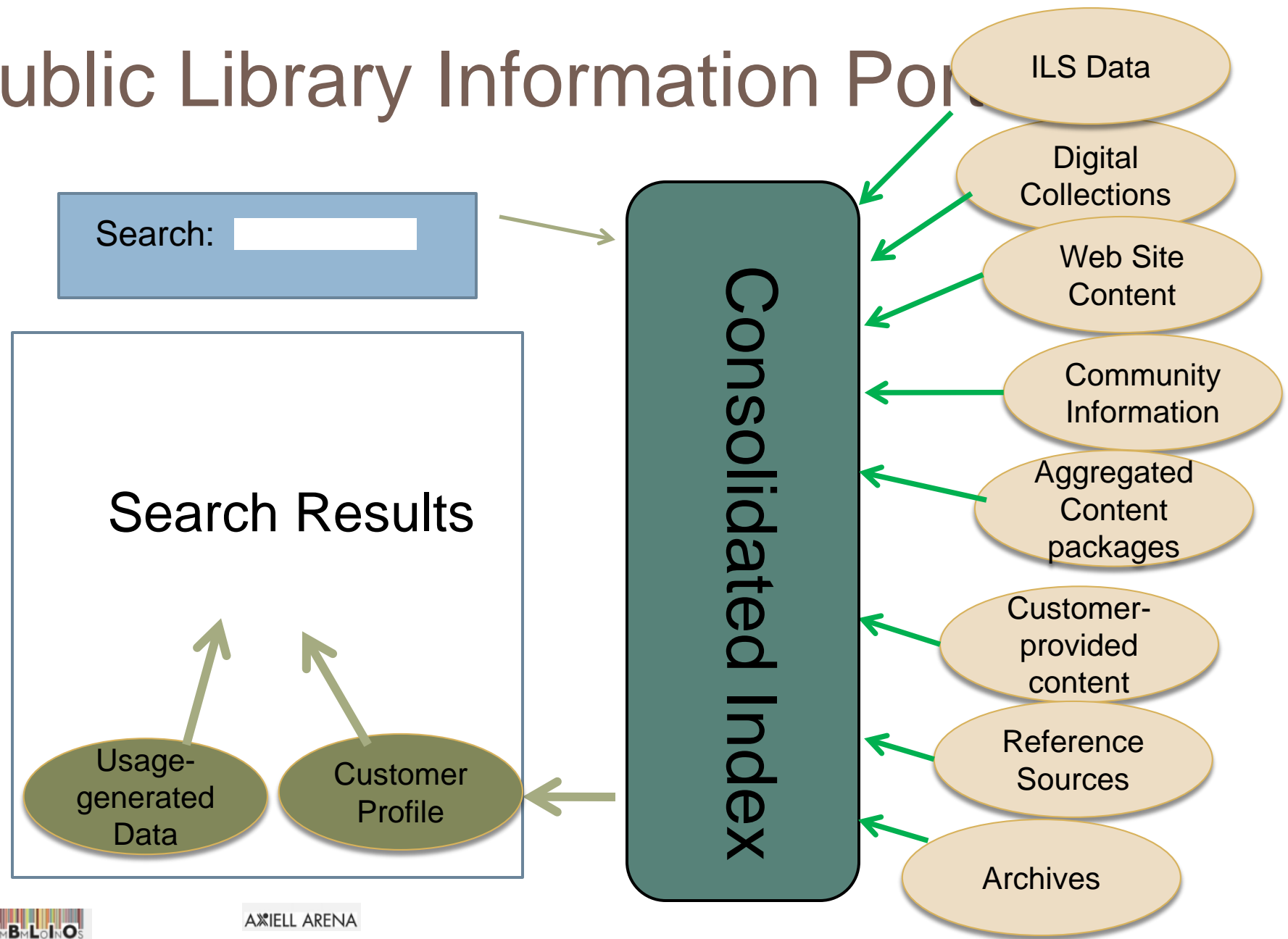
AXIELL ARENA

Infor Iguana

SirsiDynix Enterprise™

Pre-built harvesting and indexing

Bento Box Discovery Model

Search: _____

VuFind / Blacklight

Search Results

ILS Data

Web Site Content

Digital Collections

Institutional Repositories

Consolidated Index

Aggregated Content packages

Open Access

E-Journals

Pre-built harvesting and indexing
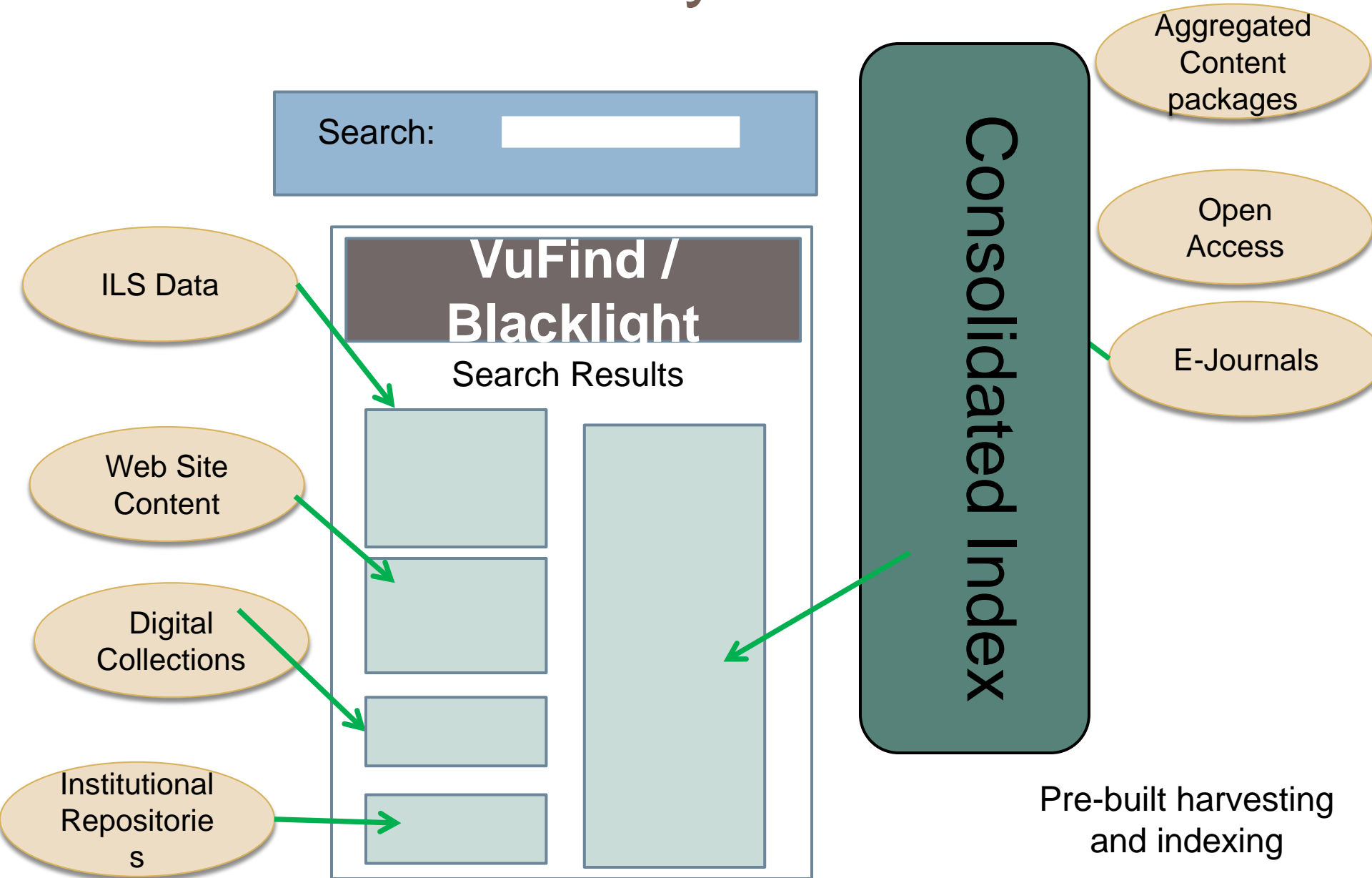
E-Book Integration Model

Search:

Aggregated Content packages

Library Catalog

Search Results

ILS Data

Web Site Content

Digital Collections

Local E-book Repository

Index

Authentication

Checkout - Download

Discovery

External E-Book Lending Service

OverDrive

3M™ Cloud Library
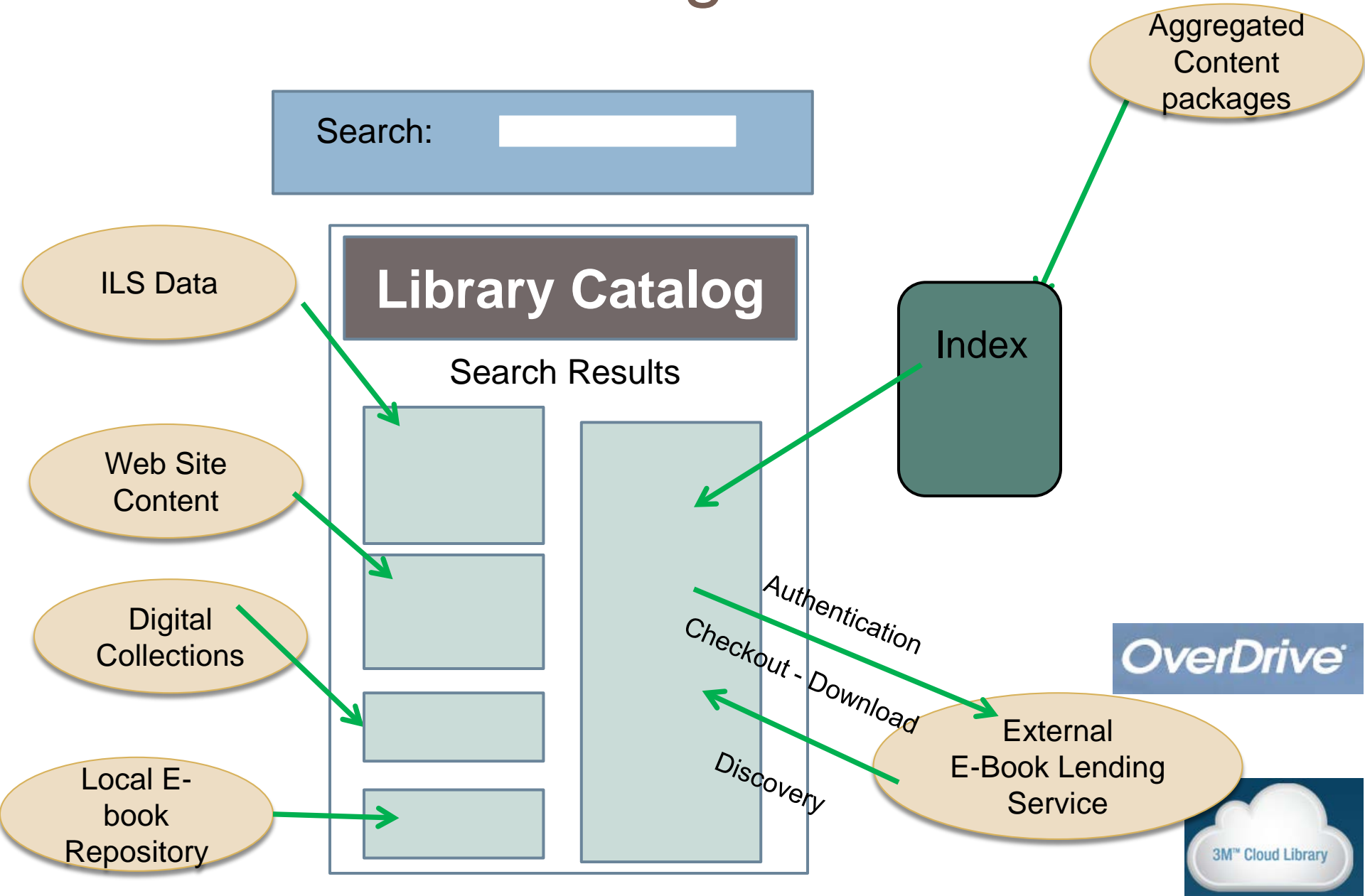
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The Bill of Rights –
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| West Duluth | |

Main Library

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Wednesday: 10:00 - 6:00
Thursday: 10:00 - 8:00
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Saturday: 10:00 - 5:00

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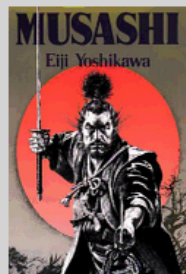
Nashville Public Library
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Narrow Your Results

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Green Hills (1)
Hermitage (1)
Main Library (2)

▼ Format
MP3 AudioBook (1)
Printed Materials (2)
WMA AudioBook (1)

▼ Author
García Márquez, Gabriel, 1928-2014 (2)
Gabriel García Márquez (1)

▼ Subject
Fiction (1)
Literature (1)

▼ Publication Year
From: [   ] To: [   ] **Go**
since 2010•since 2005•since 2000

▼ Language
English (3)

▼ Lexile Score

From: [   ] To: [   ] **Go**

▼ Literary Form
Fiction (2)

Books (2)   Audio Books (1)

Sort | Best Match ▼ |

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☐ 1   **No One Writes to the Colonel**, and Other Stories
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by Gabriel García Márquez Published 2013
MP3 AudioBook, WMA AudioBook

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0 people are on the wait list.

☆☆☆☆☆

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Library Web Presence

Public Interfaces
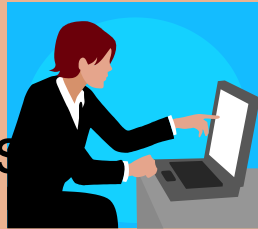
Presentation Layer

| Integrated Library System | Library Web site | Subject Guides | Article, Databases, E-Book collections |

New Library Management Model

Unified Presentation Layer

Search:

Self-Check / Automated Return

Library Services Platform

API Layer

Search Engine

Discovery Service

Consolidated index

Digital Coll

ProQuest

EBSCO …

JSTOR

Other Resources

Stock Management

Enterprise Resource Planning

Smart Cad / Payment systems

Learning Management

Authentication Service
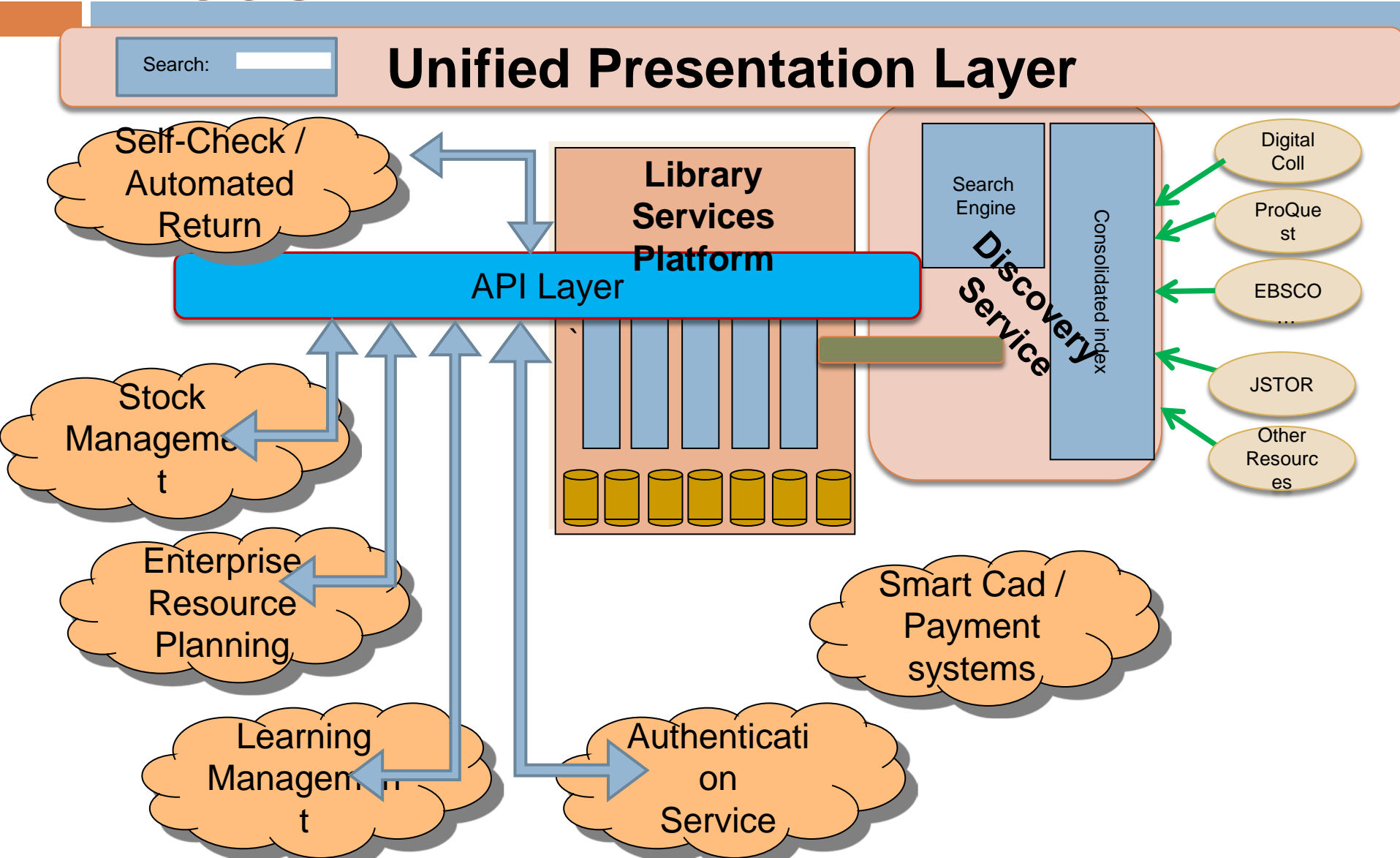
Current State of Resource Discovery

- Four commercial index-based discovery services
  - Summon, EDS, WorldCat Discover Service, Primo
- Many commercial and open source discovery interfaces
- Library Portal products: BiblioCMS, Arena, Iguana, etc
- Increasing penetration of commercial products in academic libraries

Evaluating Index-based Discovery Services

- Intense competition: how well the index covers the body of scholarly content stands as a key differentiator
- Difficult to evaluate based on numbers of items indexed alone.
- Important to ascertain now your library's content packages are represented by the discovery service.
- Important to know what items are indexed by citation and which are full text
- Important to know whether the discovery service favors the content of any given publisher

Discovery Ecosystem

- Primary Publishers
- Secondary: A&I, Aggregators
- Libraries
- Library Customers
- Discovery Service Providers

Multi-Role Stakeholders

- Content provider / Discovery Service
  - EBSCO Information Service
  - ProQuest
- Resource Management / Discovery Provider
  - OCLC
  - Ex Libris

Tension and Complexity

- Intersection of roles leads to tension and complexity

- What are the ties between Discovery and Resource management systems?

- Are their ties between Content provision and discovery

Discovery Concerns

- Important space for libraries and publishers
- Discovery brings value to library collections
- Discovery brings uncertainty to publishers
- Uneven participation diminishes impact
- Ecosystem dominated by private agreements
- Complexity and uncertainty poses barriers for participation

Heterogeneous Representations

- Content objects represented by
  - MARC Records for books and journal titles
  - Citation data for articles
  - Full text for articles
  - Full text for books
  - Abstracts and Indexing data
    - Controlled vocabularies, related terms, abstracts, selected index terms produced by subject experts
  - Other metadata or enrichment

Collection Coverage?

- To work effectively, discovery services need to cover comprehensively and evenly the body of content represented in library collections
- What primary publishers participate?
- What secondary or A&I publishers participate?
- Is content indexed at the citation or full-text level?
- What are the restrictions for non-authenticated users?
- How can libraries understand the differences in coverage among competing services?

Discovery index issues

- Indexing full-text enables keyword-based relevancy
- Citations or structured metadata provide basic terms to support search & retrieval and faceted navigation
- A&I terms provide access points, relevancy indicators that cannot be reproduced algorithmically
- Important to understand what is indexed
  - Currency, dates covered, full-text or citation
  - Many other factors

Evaluating the Coverage of Index-based Discovery Services

- Intense competition: how well the index covers the body of scholarly content stands as a key differentiator

- Difficult to evaluate based on numbers of items indexed alone.

- Important to ascertain how your library's content packages are represented by the discovery service.

- Important to know what items are indexed by citation, which are full text, and how A&I content is handled

State of Discovery indexes

- Very strong coverage of primary publishers of scholarly materials
  - Especially English and other Western Languages
- Weaker coverage of scholarly content in other international regions
  - Asian languages, Arabic, etc.
- Mixed coverage of A&I resources
- Mixed converge of non-textual resources

Some Key Areas for Publishers

1. Expose content appropriately
2. Trust that access to material will be controlled consistent with subscription terms
3. "Fair" Linking
4. Materials not disadvantaged or underrepresented in library discovery implementations
5. Usage reporting

Representation of A&I

- Important to understand how a discovery service incorporates A&I resources
  - Does it receive content from the A&I provider directly and make use of value-added terminology
  - If not: citations or full-text indexing of some portion of the titles represented in the A&I product
  - NOT the same, and possibly misleading

A&I Content in Discovery Services

- What is the place for A&I services in the discovery ecosystem
- Are there technology solutions capable of substituting for A&I content?
  - Specialized and scoped search methodologies
  - Clustering, term extraction, etc.?
- Specialized vocabulary and other metadata make positive contributions to the discovery process
- Researchers value A&I tools

Participation of A&I in Discovery

- Libraries expect participation
- A&I providers have concerns:
  - Fear that inclusion in discovery will devalue A&I subscriptions
  - If content not positioned well, libraries may not see evidence of value and drop subscriptions
- How is the brand of A&I presented to users when accessed through discovery interface
- Statistical validation of contributions of A&I to resource selection in discovery services

Library Perspective

- Strategic investments in subscriptions
- Strategic investments in Discovery Solutions to provide access to their collections
- Expect comprehensive representation of resources in discovery indexes
  - Problem with access to resources not represented in index
  - Encourage all publishers to participate and to lower thresholds of technical involvement and clarify the business rules associated with involvement
- Need to be able to evaluate the coverage and performance of competing index-based discovery products

Challenge for Relevancy

- Technically feasible to index hundreds of millions or billions of records through Lucene or SOLR
- Difficult to order records in ways that make sense
- Expectation that relevancy be neutral relative to content source or publisher
- Many fairly equivalent candidates returned for any given query
- Must rely on use-based and social factors to improve relevancy rankings

Socially-powered discovery

- Leverage use data to increase effectiveness of discovery
- Usage data can identify important or popular materials to inform relevancy engines
- Identify related materials that may not otherwise be uncovered through keyword matching
- Be careful to avoid introducing bias loops

Library Technology Report

- The Current State of Library Resource Discovery Products: Context, Library Perspectives, and Vendor Positions

- Published as LTR Issue for January 2014

ww.alastore.ala.org/detail.aspx?ID=108 95

LTR Components

- Vender questionnaire
- Library Survey
- Industry announcements
- Other articles and publications

Library Discovery Survey

- Survey executed to gather data from libraries regarding their experiences with discovery services
- Responses received by 396 Libraries:
- 29 Countries represented, 252 responses from United States

Academic	**247**
Consortium	15
Government Agency	2
Law	7
Medical	5
Museum	1
National	1
Other	1
Public	96
Special	14
State	4
Theology	3

Overall Satisfaction

Overall Satisfaction for Discovery Product		Response Distribution										Statistics			
Company	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median	Std Dev
EBSCO Discovery Service	63			1	1	1	3	11	24	16	6	7	6.98	7	0.88
VUfind	18			1		1		1	8	6	1	7	6.94	7	1.65
BiblioCommons	15					1	2	4	3	4	1	6	6.67	7	1.81
Summon	70	1		1	1	3	4	11	32	15	2	7	6.64	7	0.84
WorldCat Local	23			2	1			7	6	4	3	6	6.52	7	1.46
AquaBrowser Library	10			1	1				5	2	1	7	6.50	7	2.21
Enterprise	10				2			1	5	1	1	7	6.40	7	2.21
Primo	65			1	2	4	7	19	23	8	1	7	6.26	6	0.50
Arena	17				2	1	3	3	8			7	5.82	6	1.46
Encore	40	2		1	2	2	4	15	8	5	1	6	5.78	6	0.95
All Responses	354	4		9	13	17	23	77	129	64	18	7	6.44	7	0.32

Overall Effectiveness

Effectiveness of Interface		Response Distribution										Statistics			
Company	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median	Std Dev
EBSCO Discovery Service	63		1			2	1	12	18	21	8	8	7.17	7	1.13
BiblioCommons	15						3	1	4	6	1	8	7.07	7	1.81
Summon	67	1		1	1		3	9	22	25	5	8	7.06	7	1.10
VUfind	18			1				5	4	7	1	8	6.94	7	2.12
WorldCat Local	23					1	1	8	6	3	4	6	6.91	7	1.46
AquaBrowser Library	10					1	1	1	4	3		7	6.70	7	2.53
Enterprise	10			1	1			1	2	4	1	8	6.60	8	2.21
Primo	66			1	1	2	9	17	15	20	1	8	6.58	7	0.98
Encore	40	2			3	1	1	9	13	10	1	7	6.30	7	1.11
Arena	18				3	2	4	1	8			7	5.50	6	1.41
All Responses	348	3	1	4	10	10	23	67	106	101	23	7	6.76	7	0.38

Comprehensiveness: Academic Libraries

Comprehensiveness of Discovery		Response Distribution										Statistics			
Company	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median	Std Dev
Summon	62	1	1			1	4	11	20	18	6	7	6.94	7	0.89
WorldCat Local	21			1	1	1	1	3	5	3	6	9	6.90	7	1.96
EBSCO Discovery Service	55			1	1	1	3	15	18	11	5	7	6.78	7	0.81
Primo	57	1			1	1	7	8	25	8	6	7	6.72	7	0.93
Encore	17	1			2	1	3		5	2	3	7	6.06	7	1.70
All Responses	230	4		4	5	7	18	41	77	46	28	7	6.72	7	0.46

Relevancy Effectiveness

Effectiveness of Relevancy Rankings		Response Distribution										Statistics			
Company	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median	Std Dev
AquaBrowser Library	10			1				1	4	2	2	7	7.00	7	2.53
BiblioCommons	15					1	2	2	4	3	3	7	7.00	7	1.81
VUfind	18		1		1		3	1	4	5	3	8	6.67	7	1.89
EBSCO Discovery Service	62		1		2	6	1	12	19	17	4	7	6.66	7	0.51
Summon	70	1			1	4	9	15	22	14	4	7	6.51	7	0.36
Enterprise	10				2		1		4	1	2	7	6.50	7	2.21
WorldCat Local	23		1		1	1	3	5	7	3	2	7	6.26	7	1.46
Encore	40	2		1	2	3	8	7	7	8	2	5	5.83	6	0.47
Primo	66		3	4	4	4	12	14	13	11	1	6	5.62	6	0.12
Arena	20	1	1		1	2	3	4	8			7	5.35	6	1.57
All Responses	352	4	8	6	15	22	44	65	98	64	26	7	6.24	7	0.16

Objectivity in Discovery

Objectiveness of Discovery		Response Distribution										Statistics			
Company	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median	Std Dev
AquaBrowser Library	10				1				1	3	5	9	7.90	9	2.85
WorldCat Local	23			2			1	2	3	6	9	9	7.43	8	1.46
VUfind	18				1	1	1	2	4	2	7	9	7.28	8	2.12
Primo	61			2	2	3	5	6	13	17	13	8	7.00	7	0.26
Encore	38		2	1	1	4	2	4	4	7	13	9	6.74	8	1.14
Summon	68		2	3	1	2	8	6	14	21	11	8	6.74	7	0.97
BiblioCommons	13			1		1	2		4	2	3	7	6.69	7	1.94
Arena	18				1	1	2	1	9	3	1	7	6.61	7	2.12
EBSCO Discovery Service	62		1	6	3	6	10	7	12	13	4	8	5.82	6	0.38
All Responses	336		6	17	11	18	33	31	71	77	72	8	6.70	7	0.38

Objectivity in Discovery: Academics

Objectiveness of Discovery		Response Distribution										Statistics			
Company	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median	Std Dev
WorldCat Local	21			2			1	1	3	6	8	9	7.43	8	1.53
Primo	52			2	2	3	4	4	10	15	12	8	7.00	8	0.28
Summon	62	2	3	1	2	7	6	11	19	11	8		6.71	7	1.02
Encore	17	1	1	1	2		2	1	3	6	9		6.47	8	1.70
EBSCO Discovery Service	53	1	5	3	5	9	6	10	10	4	7		5.77	6	0.41
All Responses	222	4	14	8	12	22	21	39	57	45	8		6.62	7	0.47

Example Product rating chart

Product:		Response Distribution										Statistics		
Category	Responses	0	1	2	3	4	5	6	7	8	9	Mode	Mean	Median
General Satisfaction	65			1	2	4	7	19	23	8	1	7	6.26	6
Undergraduate Effectiveness	62		1		1	2	8	10	12	22	6	8	6.87	7
Graduate Student Effectiveness	61				3	3	9	16	20	9	1	7	6.28	6
Faculty Effectiveness	62		1	1	4	3	16	13	16	7	1	5	5.84	6
Effectiveness for General Public	65	1	1	1	6	6	8	10	13	15	4	8	6.03	6
Comprehensiveness of Scope	66	1			2	1	7	11	27	9	8	7	6.73	7
Effectiveness of End User Interface	66		1	1	2	9	17	15	20	1		8	6.58	7
Effectiveness of Relevancy Ranking	66		3	4	4	4	12	14	13	11	1	6	5.62	6
Objective Search Performance	61			2	2	3	5	6	13	17	13	8	7.00	7

Update on the NISO
Open Discovery Initiative

PROMOTING TRANSPARENCY
IN DISCOVERY

ODI context

Facilitate a healthy ecosystem among discovery service providers, libraries and content providers

Balance of Constituents

Libraries

Marshall Breeding, Vanderbilt University
Jamene Brooks-Kieffer, Kansas State University
Laura Morse, Harvard University
Ken Varnum, University of Michigan

Sara Brownmiller, University of Oregon
Lucy Harrison, College Center for Library Automation (D2D liaison/observer)
Michele Newberry

Publishers

Lettie Conrad, SAGE Publications
Roger Schonfeld, ITHAKA/JSTOR/Portico
Jeff Lang, Thomson Reuters

Linda Beebe, American Psychological Assoc
Aaron Wood, Alexander Street Press

Service Providers

Jenny Walker, Ex Libris Group
John Law, Serials Solutions
Michael Gorrell, EBSCO Information Services

David Lindahl, University of Rochester (XC)
Jeff Penka, OCLC (D2D liaison/observer)

ODI deliverables

- Standard vocabulary

- NISO Recommended Practice:
  - Data format & transfer
  - Communicating content rights
  - Levels of indexing, content availability
  - Linking to content
  - Usage statistics
  - Evaluate compliance

- Inform and Promote Adoption

ODI Timeline

Milestone	Target Date	Status
Appointment of working group	Dec 2011	✔
Approval of charge and initial work plan	Mar 2012	✔
Completion of information gathering	Jan 2013	✔
Completion of initial draft	Jun 2013	✔
Completion of final draft	Sep 2013	✔
Public Review Period commences	Sep 2013	✔
NISO Publishes Recommended Practice	June 2014	✔

ODI Recommended Practices

- Metadata elements for content providers to contribute to discovery service providers
- Content providers disclose extent to which they participate with each discovery service
- Discovery Service providers disclose what content is represented in index
- Discovery services disclose any bias in search results or relevancy relative to business relationships
- Discovery services provide use statistics

ODI Standing Committee

- Fulfilling recommendation of the ODI that NISO charge an ongoing committee to promote ODI best practices and related issues.
- Discussions may include but are not limited to:
  - brainstorming on ways to publicize and educate the community on ODI
  - answering any support questions
  - checking on status of vendor support
  - liaising with other standards efforts as applicable
  - determining when is an appropriate time to consider updating ODI

ODI Standing Committee Roster

- **Laura Morse** – Harvard University
- **Lettie Conrad** – SAGE
- **Aaron Wood** – Ingram Content
- **Elise Sassone** – Springer
- **Jason Price** – SCELC
- **Jill O'Neill** – NFAIS
- **Julie Zhu** – IEEE

- **Marshall Breeding** – Independent Consultant
- **John McCullough** – OCLC
- **Michael McFarland** – Credo
- **Rachel Kessler** – Ex Libris
- **Scott Bernier** – EBSCO
- **Steven Guttman** – ProQuest
- **Ken Varnum** – University of Michigan Library

Possible new topics for ODI

- Address topics marked out of scope by initial ODI workgroup
  - More conducive to A&I resources
  - Relevancy
  - Data exchange protocols
    - Initial phase described rather than prescribed transfer mechanisms
    - High threshold of difficulty remains for new services
  - Interoperability with library resource management systems
  - Interoperability with university learning management systems

NISO Discover White Paper

- Advise Discovery to Delivery Topic Committee on possible areas of future interest or activity
- Overview of the current state of library resource discovery
- Recommendations for next stages of ODI
- API ecosystem: extend and interoperate
- Discovery beyond the library
- Importance of Linked Data on future models of discovery
- Extend keyword relevancy to leverage Linked Data

The future of Resource Discovery

- More comprehensive discovery indexes
- Stronger technologies for search and retrieval
- Discovery beyond library-provided interfaces
- Linked Data to supplement discovery indexes

Linked data

- Not yet a fully operational method for library-oriented content
  - Increasing representation of bibliographic resources
  - BIBFRAME stands to make great impact
- Universe of scholarly resources not well represented
- Will current expectations for content providers to make metadata or full text available for discovery expand to exposure as open linked data?

Hybrid models

- Can index-based search tools be improved through Linked Data
  - Browse to related resources
  - Add additional hierarchies of structure to search results

Open Access / Open Source

- Open source tools exist for discovery Interfaces:
  - VuFind
  - Blacklight
- No open access discovery indexes
  - High threshold of expense and difficulty to build index
  - Platform costs
  - Software development
  - Publisher relations
  - Billions of content items to index and maintain
- Opportunities to lower barriers to entry?

Discovery <> Resource Management

- New Library Services Platforms offered with discovery services:
  - Alma + Primo
  - WorldShare Management Services + WorldShare Discovery Services
  - Intota + Summon
  - Sierra + Encore
- Exceptions
  - Kuali OLE (designed to work with any discovery layer)
- Should the linkage be strong or weak?

Discovery beyond Library Interfaces

- Improved performance of library content through Google Scholar
  - Same expectations for transparency?
- Better exposure of library-oriented content
  - Schema.org or other microdata formats
- Better exposure of scholarly resources
  - Open access & Proprietary
- Embedded tools in other campus interfaces

Questions and discussion